

N<sup>o</sup> 18,543



A.D. 1910

Date of Application. 27th Aug., 1910—Accepted, 9th Feb., 1911

COMPLETE SPECIFICATION.

Improvements in Door Fastenings.

We, ALFRED PERCY BISHOP, of Southampton House, 317, High Holborn, London, Manager, and MATTHEW FAVERO, of 13, Adelaide Road, Southall, Middlesex, Engineer, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

The object of the present invention is to provide an improved construction of fastening for doors particularly the doors of taxi cabs and railway and other carriages.

The present invention has reference to door fastenings of the kind which comprises a spring catch situated in a recess preferably in the framing of the doorway and cooperating with a recess opposite in the door, within which recess in the door is a pusher operated by the door handle against the pressure of the spring to push back the spring catch before mentioned out of engagement with the recess in the door. The spring catch has a retaining catch capable of holding the said spring catch in its withdrawn position, which retaining catch is liberated by the shutting of the door pressing on a trigger connected therewith.

We will now describe the improvements in this kind of door fastening which constitute the subject of the present application.

The invention is illustrated in the accompanying drawings.

Figure 1 shews in sectional plan the lock complete as it appears fitted when the door is fastened.

Figures 2, 3, 4, & 5 shew detached that portion of the lock which embodies the bolt or catch and which as illustrated in Figure 1 is mounted on the frame or stile of the door way.

Figure 2 is a front view,

Figure 3 is a side view,

Figure 4 is a sectional plan on the line A A of Figure 2 and

Figure 5 is a cross section on the line B B of Figure 4.

Figures 6, 7, 8, & 9 shew detached that portion of the lock, which provides the engagement or recess for the bolt carried by the opposite part, and is shewn in the complete view Figure 1 mounted on the door itself.

Figure 6 is a side view,

Figure 7 is a front view,

Figure 8 is a section on line C C of Figure 7 and

Figure 9 is a section on line D D of Figure 8.

*a* is the door and *b* is the doorway frame. The catch mounted on the frame *b* consists of a bolt *c* mounted to slide in a box *d* and pressed outward by a spring *e*. The sliding movement of the bolt *c* is limited by a screw *f* projecting into a slot *g* in the front of the said bolt. In the back of the bolt *c* is a depression *h* adapted to engage with a finger *i* pressed towards the bolt through the side of the box *d* by a spring *j*. When the bolt *c* is pushed back it is caught and retained by the finger *i* until disengaged by pressing back the spring of the latter which is effected by the knob *r* on the edge of the door *a* coming into contact with the end of the spring which is furnished with a button *k* to facilitate the contact and to act as a trigger. The bolt *c* may be pushed back by the door striking against its rounded end when the door is closed if the bolt happens to have been accidentally released while the door is open. To thrust it back

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however for the purpose of opening the door the handle is employed operating on the spindle *l* see Figures 1, 6, 7, 8, and 9. The spindle *l* has upon it a fork *m* which engages with a pin *n* carried by the slide or pusher *o* which is normally retained within its box *p* by the spring *q* but which can be thrust forward by turning the handle. The movement of the slide *o* extends from the position shewn in Figure 9 to a position flush with the edge of the door. The slide *o* and its box *p* are placed exactly opposite the bolt *c* so that the latter can engage with the box when the door is closed. 5

The action of the parts above enumerated is as follows:—When the door *a* is in a closed position the spring bolt *c* protrudes into the opposite recess of the door and retains the door shut. To open the door the handle is turned and the pusher *o* thrusts back the spring bolt *c* into its own recess so that it is caught and held by the retaining finger *i*. The door is then free to open. When the handle is released the pusher retires preferably under the impulse of the spring *q* to its position of rest. The spring bolt *c* remains withdrawn until the re-closing of the door disengages the retaining finger *i* and allows the spring bolt *c* to reengage with the recess opposite. 15

Should the trigger device be tampered with and the spring bolt be liberated while the door is open, the closing of the door will not be prevented, for the spring catch will snap into engagement with the recess opposite in the ordinary manner. 20

Having now particularly described and ascertained the nature of our said invention, and in what manner the same is to be performed, we declare that what we claim is:—

In a fastening for doors comprising a spring bolt, means for retaining the bolt withdrawn, means for releasing the bolt by the closing of the door, means for engaging with the bolt to fasten the door when the door is closed and the bolt released and means for pushing the bolt out of engagement with the fastener when the handle is turned and causing it to reengage with its retaining device, the construction and arrangement described & shewn in the accompanying drawings. 30

Dated this 27th day of August, 1910.

NEWTON & SON,

Chartered Patent Agents,

6, Bream's Buildings, Chancery Lane, London, E.C.4.

Agents for the Applicants. 35

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Dated this 27th day of August, 1910.

NEWTON & SON,

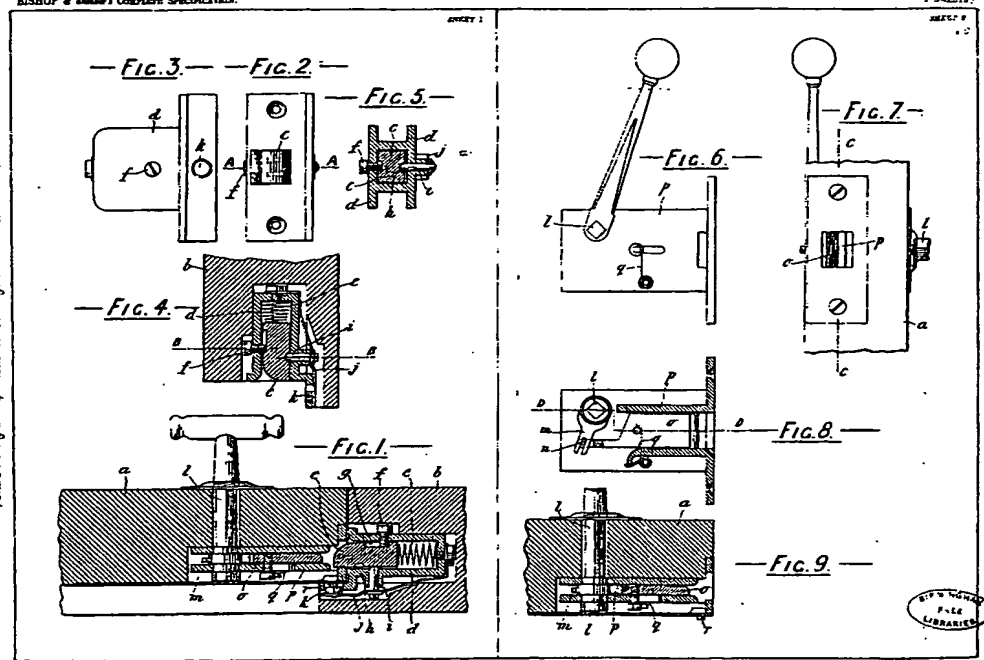
Chartered Patent Agents;

6, Bream's Buildings, Chancery Lane, London, E.C.,  
Agents for the Applicants.

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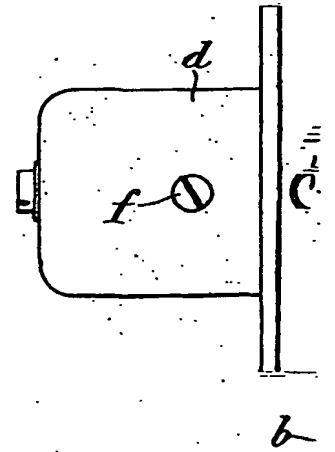
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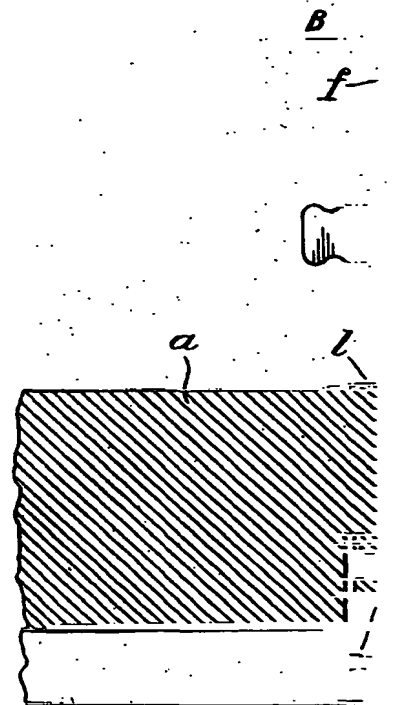


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— FIG. 3. —



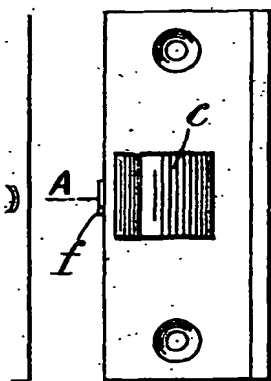
— FIG. 4. —



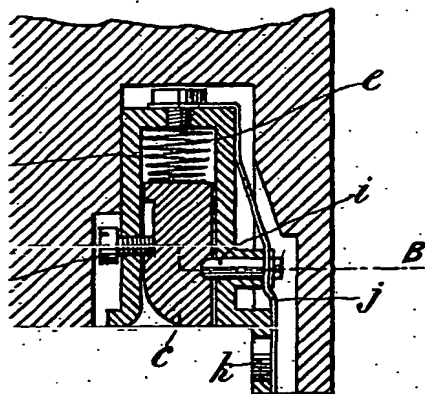
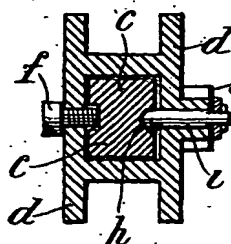
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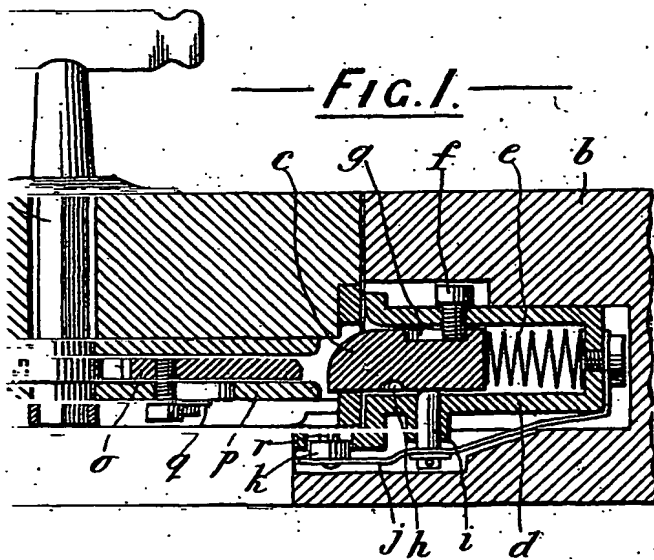
—FIG. 2.—



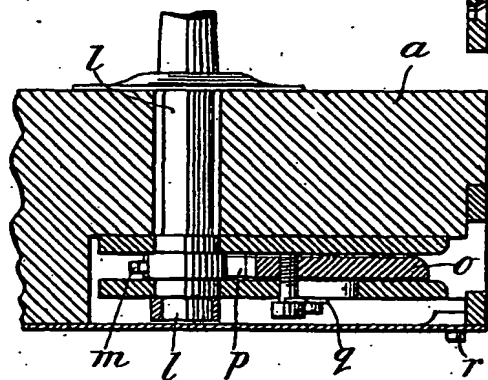
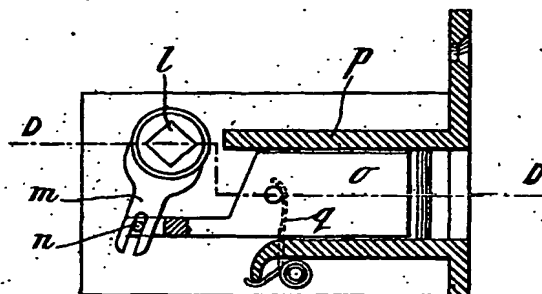
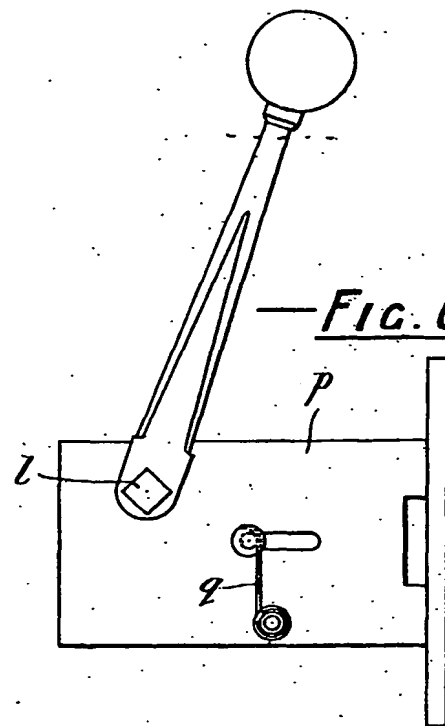
—FIG. 5.—



—FIG. 1.—



—FIG. 6.—



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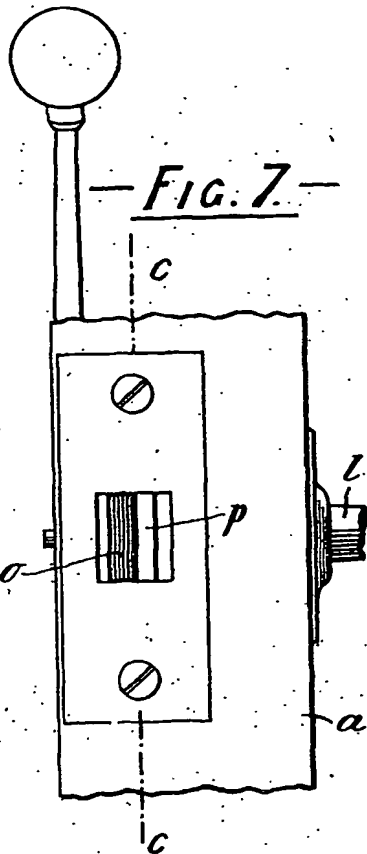


Fig. 8.

Fig. 9.

